

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-28. (Canceled)

Claim 29. (Withdrawn) An aqueous liquid dispersion comprising a photocatalytic metal oxide or metal sulfide and an adhesion promoter selected from the group consisting of: (a) organometallic compounds of formula $M(OR)_4$ or $M(OR)_3R'$, wherein M is a metal and R and R' are each independently a straight chain or branched carbon radical having from 1 to 6 carbon atoms; (b) alkali metal silicates; (c) alkaline-earth metal silicates; (d) aluminosilicates; (e) polysiloxanes; (f) silicon alkoxides; and (g) mixtures thereof.

Claim 30. (Withdrawn) The liquid dispersion of Claim 29, wherein the photocatalytic metal oxide is titanium oxide at least partially crystallized in anatase form and the dispersion is a colloidal dispersion.

Claim 31. (Withdrawn) The liquid dispersion of Claim 29, further comprising an additive to stabilize the dispersion.

Claim 32. (Withdrawn) The liquid dispersion of Claim 31, wherein the additive is selected from the group consisting of β -diketones, acids, glycols, polycarboxylates, silanes and mixtures thereof.

Claim 33. (Withdrawn) The liquid dispersion of Claim 31, wherein the solids content of the liquid dispersion is between 0.5 to 2 %.

Claim 34. (Withdrawn) The liquid dispersion of Claim 33, wherein between 50 % to 80 % of the solids content is the photocatalytic metal oxide or metal sulfide and between 20 % to 50 % of the solids content is the of the adhesion promoter.

Claim 35. (Withdrawn) A permeable architectural material having a surface that is impregnated with a photocatalytic metal oxide or metal sulfide that is fixed to the surface with one or more fixatives obtained from curing one or more adhesion promoter.

Claim 36. (Withdrawn) The permeable architectural material of Claim 35, wherein the surface is impregnated to a depth of up to 400 μm .

Claim 37. (Withdrawn) The permeable architectural material of Claim 36, wherein the surface is impregnated to a depth of up to 20 μm .

Claim 38. (Withdrawn) The permeable architectural material of Claim 35, wherein the photocatalytic metal oxide or metal sulfide comprises titanium oxide that is at least partially crystallized in anatase form.

Claim 39. (Withdrawn) The permeable architectural material of Claim 35, wherein the adhesion promoter is selected from the group consisting of: (a) organometallic compounds of formula $M(OR)_4$ or $M(OR)_3R'$, wherein M is a metal and R and R' are each independently a straight chain or branched carbon radical having from 1 to 6 carbon atoms; (b) alkali metal silicates; (c) alkaline-earth metal silicates; (d) aluminosilicates; (e) polysiloxanes; (f) silicon alkoxides; and (g) mixtures thereof.

Claim 40. (Withdrawn) A kit comprising a concentrated liquid dispersion comprising a photocatalytic metal oxide or metal sulfide and a concentrated liquid dispersion comprising an adhesion promoter.

Claim 41. (New) A process for treating a permeable architectural material, comprising:

spraying onto the architectural material having a surface to be treated, selected from the group consisting of fascia or building coatings, paving stones, architectonic concrete, tiles or any material based on a cement composition, concrete objects, terracotta, slate and stone, one or more liquid phase dispersions of at least one photocatalytic metal oxide or metal

sulfide compound and at least one compound which promotes the adhesion of the photocatalytic compound to the architectural material, which impregnates the architectural material, and

after spraying, removing liquid phase dispersion from the surface of the architectural material and achieving the spontaneous curing of the at least one adhesion promoter which impregnates the permeable architectural material at ambient temperature.

Claim 42. (New) The process according to Claim 41, wherein the photocatalyst is titanium oxide in at least partially crystallized anatase form.

Claim 43. (New) The process according to Claim 41, wherein the photocatalyst is a particulate material having an average diameter of not more than 150 nm and is prepared as an aqueous colloidal suspension.

Claim 44. (New) The process according to Claim 43, wherein the photocatalyst is a particulate material having an average diameter of not more than 100 nm

Claim 45. (New) The process according to Claim 41, wherein the at least one adhesion promoter is soluble or dispersible in an aqueous phase.

Claim 46. (New) The process according to Claim 41, wherein the adhesion promoter, once sprayed onto the surface and impregnated into the architectural material, becomes fixed by curing initiated by a chemical or physical change, thereby essentially insolubilizing the applied material in an aqueous medium.

Claim 47. (New) The process according to Claim 41, wherein the chemical or physical change is hydrolysis, carbonation, cross-linking or coalescence.

Claim 48. (New) The process according to Claim 41, wherein the adhesion promoter is a tetraalkoxide or trialkoxide organometallic compound of the formula $M(OR)_4$ or $M(OR)_3R'$, wherein M is Ti or Zr and R and R' are each a linear or branched C_{1-6} -alkyl group, which are identical or different, a metal halide or a silicon alkoxide.

Claim 49. (New) The process according to Claim 41, wherein the adhesion promoter is an alkali or alkaline earth metal silicate or an aluminosilicate.

Claim 50. (New) The process according to Claim 49, wherein the adhesion promoter is potassium, sodium or lithium silicate.

Claim 51. (New) The process according to Claim 41, wherein the adhesion promoter is a polysiloxane.

Claim 52. (New) The process according to Claim 41, wherein the liquid phase of the dispersion is aqueous.

Claim 53. (New) The process according to Claim 41, wherein a single liquid dispersion comprising the photocatalyst compound and the adhesion promoter is sprayed onto the architectural material.

Claim 54. (New) The process according to Claim 41, wherein one or more dispersions containing photocatalytic compounds and one or more dispersions containing adhesion promoters are simultaneously or sequentially sprayed onto the architectural material.

Claim 55. (New) The process according to Claim 54, wherein, in sequence, a dispersion containing a photocatalytic compound is sprayed onto the architectural material followed by spraying one or more dispersions containing adhesion promoters.

Claim 56. (New) The process according to Claim 41, wherein the impregnation of applied material into the architectural material ranges to a depth ranging to 400 μm from the surface.

Claim 57. (New) The process according to Claim 56, wherein the impregnation of applied material into the architectural material ranges to a depth ranging to 100 μm .

Claim 58. (New) The process according to Claim 41, wherein the liquid dispersions of photocatalyst compound and adhesion promoter are prepared and packaged in concentrated form, which dispersions are diluted or mixed immediately prior to use.

Claim 59. (New) The process according to Claim 41, wherein the liquid dispersions prepared each comprise at least one dispersion stabilizer selected from the group consisting of chelating agents, β -diketones, acids, glycol compounds and silane polycarboxylates.

Claim 60. (New) The process according to Claim 41, wherein the dispersion of the photocatalyst compound when ready to spray is adjusted to a solids content of not more than 30 % by wt.

Claim 61. (New) The process according to Claim 60, wherein the dispersion of the photocatalyst compound when ready to spray is adjusted to a solids content of not more than 10 % by wt.

Claim 62. (New) The process according to Claim 41, wherein the dispersion of the adhesion promoter compound when ready to spray is adjusted to a solids content of at least 0.2 to not more than 20 % by wt.

Claim 63. (New) The process according to Claim 62, wherein the dispersion of the adhesion promoter is adjusted to a solids content of at least 0.25 to not more than 2 % by wt.

Claim 64. (New) The process according to Claim 41, wherein the amounts of photocatalytic compounds and adhesion promoter compounds fixed within the architectural material are at least 0.5 to not more than 10 g/m² of surface treated.

Claim 65. (New) The process according to Claim 64, wherein the amounts of photocatalytic compounds and adhesion promoter compounds fixed within the architectural material are at least 1 to not more than 10 g/m² of surface treated.

Claim 66. (New) The process according to Claim 41, wherein removal of sprayed dispersion material on the surface of the architectural material and curing of impregnated dispersion material occurs in the absence of a post-treatment.

Claim 67. (New) A method of treating a permeable architectural material, comprising:

spraying an aqueous liquid dispersion comprising:

- i) a photocatalytic metal oxide or metal sulfide particulate compound;
- ii) at least one organometallic compound, alkali or alkaline earth silicate or aluminosilicate, polysiloxane or silicon alkoxide; and
- iii) optionally at least one additive selected from the group consisting of a β -diketone, an acid and a glycol compound.onto a permeable architectural material, having a surface to be treated, selected from the group consisting of fascia or building coatings, paving stones, architectonic concrete, tiles or any material based on a cement composition, concrete objects, terracotta, slate and stone, thereby imparting anti-soiling, antifungal and/or antibacterial properties to the treated architectural material.